EST 441 Interdisciplinary Senior Project  
Spring 2019  
Tu. & Th. 1:00pm-2:20pm  
Location: CS 1310

**Instructor:**  
Elizabeth Hewitt, PhD, LEED AP  
Office Location: Rm 1411 Computer Science  
Office Phone: 631.632.3241  
Email: elizabeth.hewitt@stonybrook.edu

**Teaching Assistant:**  
Yiyi Wang, Doctoral Student Dept. of Technology & Society  
Email: yiyi.wang@stonybrook.edu

**Office Hours:**  
Tuesdays and Thursdays 11:30am – 1:00pm (or by appointment)

**Course Description:**  
*Students carry through to completion their own research, development or product evaluation project. Requires practical steps including garnering faculty mentorship, creating a schedule, assembling resources, conducting research or working on prototype, and a final paper and presentation.*

Students will select a technology-oriented topic. Students will work individually on the topic and present on their research. A paper will also be produced. We will closely read a book on what “technology” is, and how new technologies develop.

**Learning Objectives:**  
- Students will improve research and oral and written presentation skills.  
- Students will learn to carefully analyze a piece of writing in their skill area.  
- Students will refine their understanding of how technology develops.  
- Students will improve their ability to speak publicly and substantively on technical matters

**Required Book:**  

**Structure of the Class**  
On most typical weeks of class, we meet together for a seminar discussion about the current book chapter on *Tuesdays*, and check in with Prof. Hewitt individually about your final project on *Thursdays*. You must attend all seminar days on Tuesdays, and actively participate in the discussion of the book. In order to facilitate meaningful discussion with students about their final projects, *only half of the class will have a check in meeting each Thursday*. We will alternate weeks based on the letter your last name begins with; last names beginning A-L will meet with me one week and last names beginning M-Z will meet with me the following week (see the class schedule on p.4 for more clarification). *You do not need to attend class on Thursdays on the day you do not have a check-in meeting with Prof. Hewitt.*
Grading
Grading will be based on attendance, writing (2) reaction papers for the seminar portion of the class, the final topic presentation, and the final topic paper.

Attendance: 10%
Seminar reaction papers: 20%
Final Presentation: 20%
Final Paper: 50%

Attendance (10%)
Attendance is required. You may have one unexcused absence during the semester. Additional unexcused absences (without advance notification to Prof. Hewitt of a serious/legitimate issue) will result in a 2-point deduction from your final grade.

Seminar reaction papers (20%)
You must select any two chapters from the course book The Nature of Technology and prepare a 2-page reaction paper. The reaction papers should, first, provide a short summary of the chosen chapter. This should be no longer than 1-3 paragraphs. Importantly, the remainder of the 2 pages should be your reaction/response to the chapter. I am looking for your own critical thinking and thoughtful analysis. Do you agree or disagree with the author’s position? Where could the argument be expanded? How could the argument be strengthened? Reaction papers for a given chapter are due by the start of class (1pm) on the day we cover that particular chapter in our seminar. You may not submit a reaction paper for a chapter once we have discussed it in class. You may choose any two chapters throughout the semester to submit these assignments, but you must have submitted both by the time we finish the book together in class (4/23/19). Late submissions of reaction papers will not be accepted. Each reaction paper is worth 10 points/10%.

Presentations (20%)
Final presentations will be 10 minutes long, and will give the class an overview of your research. The order of presentations will be determined randomly closer to the end of the semester. There will be 7-8 presentations per class, and final presentations will occur during the last four sessions of our class (4/30, 5/2, 5/7, and 5/9). Presentations are worth 20 points (20% of your grade) and will be graded based on technical content (subject and understanding) (10 points), organization (4 points), presence, style, and graphic clarity (4 points), and overall impression (2 points). You must upload a copy of your presentation to Blackboard on the day you present.

Papers (50%)
The final paper should be 12-15 pages long, and should be professionally researched, formatted, cited, and written. Ample help will be provided throughout the semester to give you the tools needed to undertake and complete a successful research project. All final papers are due on the last day of class (5/9), regardless of the day you are assigned to present. Final papers must be submitted in hard copy to Prof. Hewitt and uploaded to Blackboard by the start of class on the due date. A rubric with guidance about how the final papers will be graded will be provided by spring break. The paper is worth 50 points/50% of your final grade.
**Academic Integrity:**
Academic integrity is taken very seriously in this class, and students are held to high standards of honesty and accountability in their assignments and writing. You are responsible for the final product you produce and submit in this class; **ANY** incidence of plagiarism in the class will be reported to CEAS. As per Stony Brook guidelines: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty is required to report any suspected instances of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty please refer to the academic judiciary website at: [http://www.stonybrook.edu/commcms/academic_integrity/index.html](http://www.stonybrook.edu/commcms/academic_integrity/index.html)

**Disability Support Services (DSS) Statement**
If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, Room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website: [http://www.stonybrook.edu/ehs/fire/disabilities](http://www.stonybrook.edu/ehs/fire/disabilities)

**Critical Incident Management:**
Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE(S)</th>
<th>TUESDAY</th>
<th>THURSDAY</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1/29, 1/31</td>
<td>Intro to class policies and expectations</td>
<td>Conducting research/selecting a topic/citations and sources</td>
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<tr>
<td>2</td>
<td>2/5, 2/7</td>
<td>Seminar: Chapter 1 the Nature of Technology</td>
<td><em>Select topic – Discussion of topics</em></td>
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<tr>
<td>3</td>
<td>2/12, 2/14</td>
<td>Seminar: Chapter 2</td>
<td>Check in (last names A-L)</td>
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<td>4</td>
<td>2/19, 2/21</td>
<td>Seminar: Chapter 3</td>
<td>Check in (last names M-Z)</td>
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<td>5</td>
<td>2/26, 2/28</td>
<td>Seminar: Chapter 4</td>
<td>Check in (last names A-L)</td>
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<td>6</td>
<td>3/5, 3/7</td>
<td>Seminar: Chapter 5 (PhD lecture)</td>
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<td>7</td>
<td>3/12, 3/14</td>
<td>Seminar: Chapter 6 (PhD lecture)</td>
<td>Check in (last names A-L)</td>
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<td>8</td>
<td>3/19, 3/21</td>
<td>Spring Break – NO CLASS</td>
<td>Spring Break – NO CLASS</td>
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<td>9</td>
<td>3/26, 3/28</td>
<td>Seminar: Chapter 7</td>
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<td>10</td>
<td>4/2, 4/4</td>
<td>Seminar: Chapter 8</td>
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<td>4/9, 4/11</td>
<td>Seminar: Chapter 9 (PhD lecture)</td>
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<td>4/16, 4/18</td>
<td>Seminar: Chapter 10</td>
<td>Check in (last names A-L)</td>
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<td>13</td>
<td>4/23, 4/25</td>
<td>Seminar: Chapter 11</td>
<td>Check in (last names M-Z)</td>
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<td>14</td>
<td>4/30, 5/2</td>
<td>Presentations Day 1</td>
<td>Presentations Day 2</td>
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<td>15</td>
<td>5/7, 5/9</td>
<td>Presentations Day 3</td>
<td><em>Final project papers due</em></td>
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